S Tec D07 Flow Self Locking Descender

S Tec D07 Flow Self Locking Descender Instruction Manual

Contents

S Tec D07 Flow Self Locking Descender

INSTRUCTIONS FOR USE AUTO-STOP DESCENDER

WARNING
All users must read and understand this manual before use. This product must only be used by persons who are trained and competent in its use as part of a double rope access system. Users accept all risks and responsibilities for all
damage, injury or death during all rope access activities involving the use of this product. If users are not able to accept full responsibility or all risks involved they should not use this product. All users must be competent in emergency procedures and rescue methods associated with the use of this device. Users should take great care that hair, fingers, clothing or other items do not become entangled. DO NOT allow anything to affect the proper function of the device. Do not use the device for any other purpose miss-use can cause damage or serious injury including death.

Individually Tested
2841: 2006 Type C/ EN341: 2011 Type 2 – Class A
FOR USE ON ENI 891:1998 TYPE A – LOW STRETCH ROPES

- Rope: 10.5 – 11.5 mm
- EN1891 TypeA / NBR 15986
- Anchor Point Minimum 15 kN Test
- Test Mass: 100kg /200Kg – 2201b/440 lb
- Weight 515g / 17,5 oz

www.safetecbr.com.br
Made in Brazil – SAFE TEC INDUSTRIA

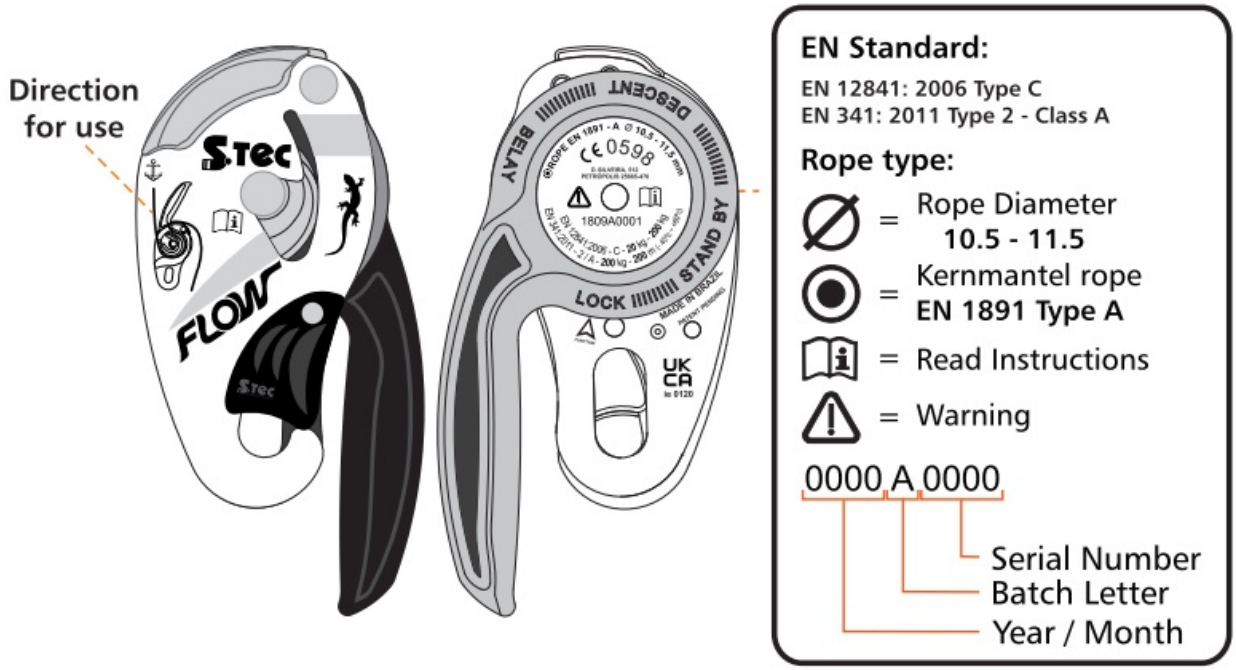
RECORD OF USE			
Device		FLOW	
Supplier		S.Tec	
Serial Number			
1st use	Expiry		
Acquisition date			
User Traceability			

Record of Use and Periodic Examinations
Users should record details of use.
Maximum period between Periodic Examinations is 6 months

Date	User or Examiner	Details of Use-or Result of examination

Duplicate this sheet for continued recording.
Contact Safe Tec for further information.

MARKING

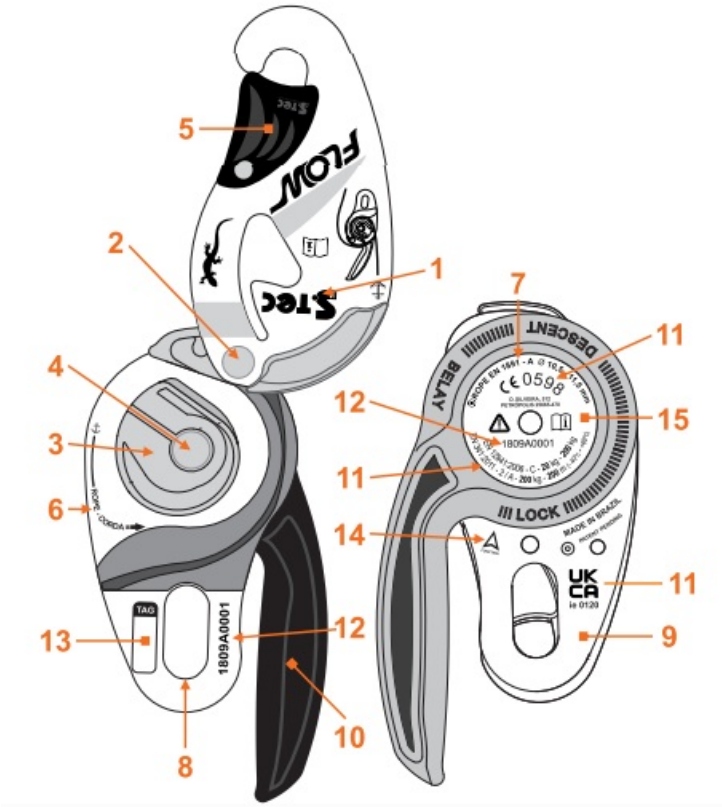


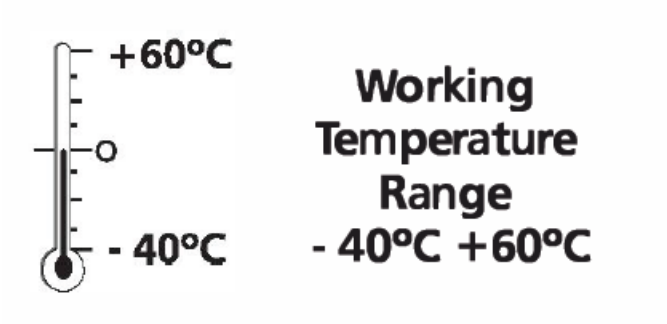
ATTENTION
If marking with user's identification, care must be taken to ensure that full function is maintained and the device is

not damaged.

NOMENCLATURE – PARTS

1. Moving side plate
2. Moving plate pivot axel
3. Cam
4. Cam axel
5. Opening Gate
6. Direction to anchor point
7. Product Information
8. Attachment Point
9. Fixed Side Plate
10. Control Handle
11. Standards and Certifications
12. Serial and traceability number
13. Tag designated field
14. Indication Arrow pointer
15. Washer





Safetec "FLOW" Working Line Descender Devices.

Minimum slippage load: 4kN Max continous descend: 2OOm Max speed 1 person = 1 rn/s Max speed 2 people = 0,5 m/s

DESCRIPTION AND FIELD OF USE/ APPLICATION

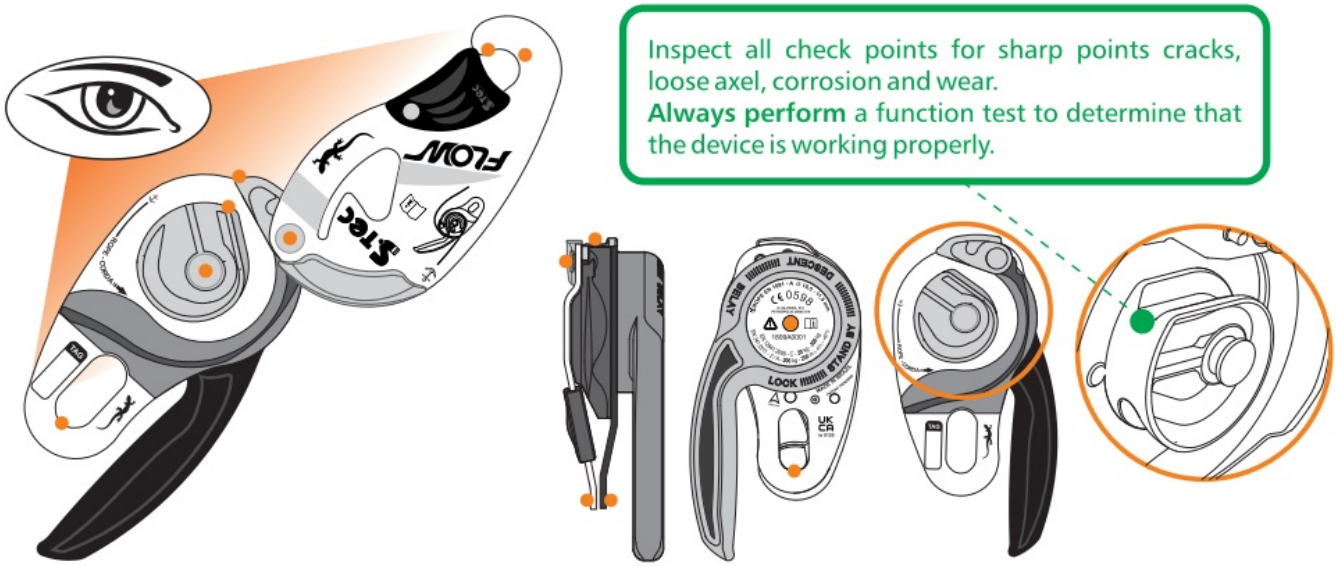
- The S.Tec FLOW is designed to be used to protect users from falls from height during personal activities using ropes.
- The range of FLOW Descenders has been developed for use in vertical activities including Rope Access, Rope Rescue Systems, Working at height and Adventure Activities including abseiling, cascade waterfall descent, ravines, etc. Specific training is required for users of all models. The D05(Green) is the top of the range device which includes anti-panic mechanism and auto re-set handle.
- The D05(Green) is recommended for all users including beginner's and experts.
- The D06(Black) and D07(Red) do not have the anti-panic mechanism which allows continuos controlled descent even when angle of descent and loading varries.
- The D06 and D07 are designed for expert usage where all users must be aware that full deployment of the handle with no rope control will result in uncontrolled descent and possible serious injury. D06 and D07 are also designed for tactical use and allow the user to develop almost free – fall speed.

- The FLOW descenders have been tested in accordance with EN 12841 2006 Type C and EN 341 :2011 Type 2, Class A to be used with EN 1891: 1998 Type A/ NBR 15896 low stretch ropes of diameter between 10.5 and 11.5 mm for loads between 45 and 200 Kg. Certified for 200 meters continuous descents, being able to use for continuous descents of up to 500 meters.

INSPECTION

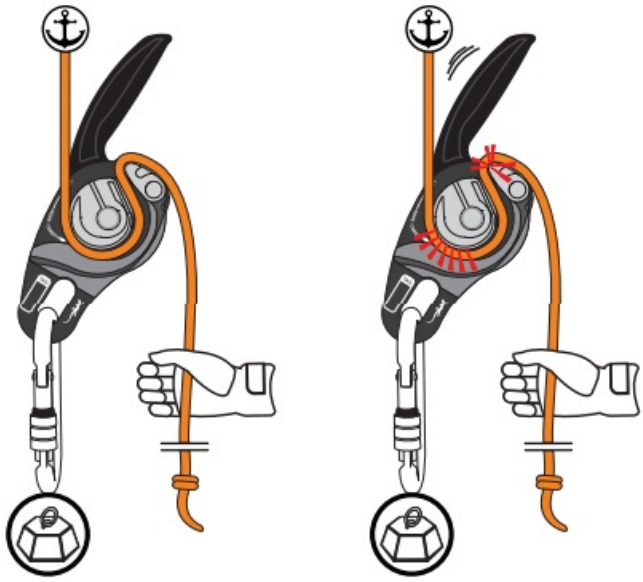
For the safe operation, the FLOW requires inspection prior, during and after to each use. Verify that there are no cracks, abrasion, damage, corrosion, heavy marks or sharp parts, signs of falls, deformation etc. Pay special attention to the gate action and security. In addition to these inspections, formal – through inspections are required by a nominated competent person at intervals not exceeding 6 months. Arduos conditions, heavy use or incidents will require additional interim inspections. All formal -thorough and interim inspections should be recorded. Following any fall or sign of damag the device must be removed from service.

Check Points



PRINCIPLE OF OPERATION

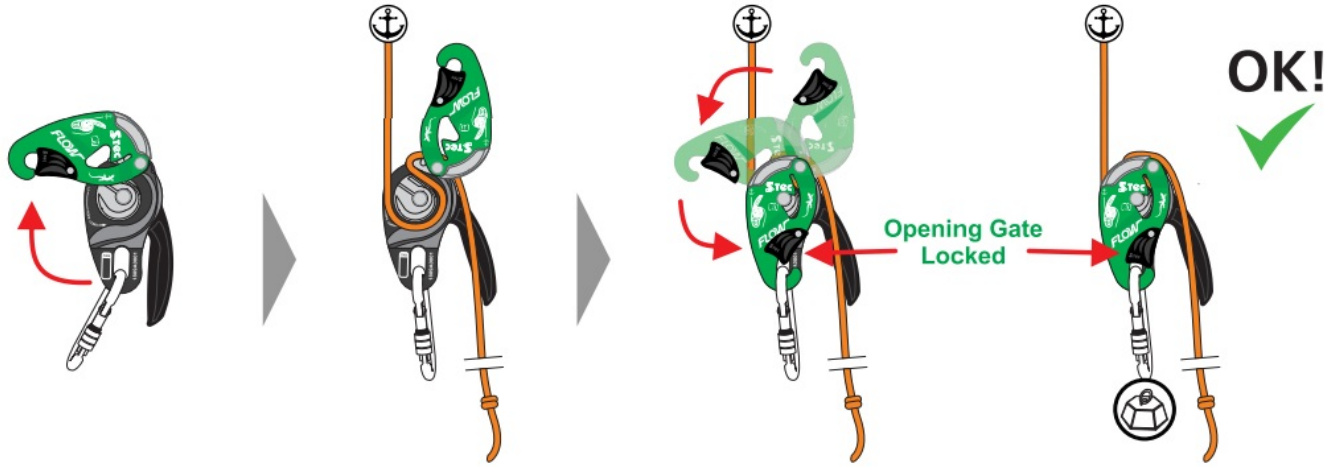
When in use the tension on the rope activates the cam and restricts movement. Holding the rope in the braking (descent) position helps prevent movement.



Keep FLOW and ropes clear of oils, grease, soil, paint and other contaminants.

INSTRUCTIONS FOR USE

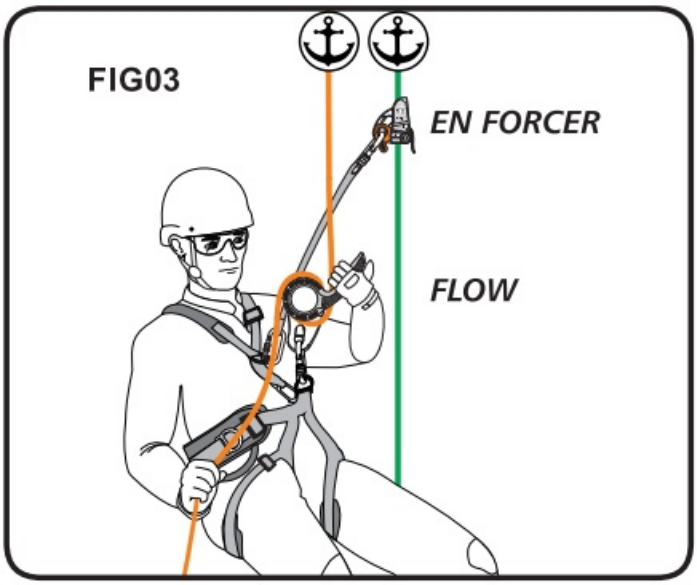
- The FLOW must be used with compatible equipment. Only use theFLOWwith a suitable harness and in accordance with harness instructions.
- Attach to the harness using a suitable locking karabiner(EN 362) installed through the FLOW attachment point. Ensure that the karabiner fits through both side plates and that the karabiner is fully secured. Open the device using the gate, turn the side plate and insert the rope as shown. Close the moving side plate as shown, making sure that the rope stays in position and that the side plate is completely closed and that the clipgate is fully secured. Remove any slack in the rope between the anchor point and the FLOW.
- If the rope is installed at wrong direction, the device will not function and may result in damage or injuries.



HOW TO USE

Before each use, users must perform a function test to ensure that the rope is correctly installed and device functions correctly. The function test must be performed in a safe position our when the user is protected by two independent safety systems. 1. Pull on the anchor section of rope – the device must lock and allow no rope to pass

through. 2. With one hand hold the lower end of the rope and the other hand on the FLOW control handle, apply light pressure to the control handle, check that the rope moves through the FLOW at a controlled rate and that the side plates does not open. 3. Release the handle and verify that the rope movement stops. During descents adjusting the pressure applied to the control handle will affect the rate of movement. At all times the control handle is held or operated the user must hold the rope section below the FLOW descender.

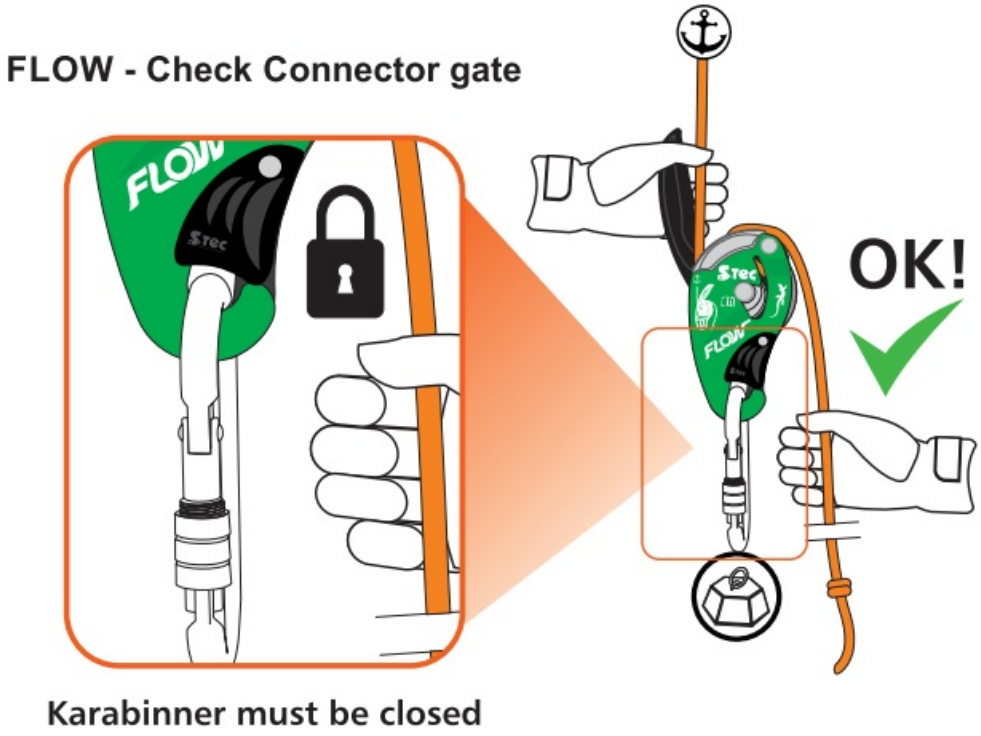


Note: When using the FLOW, to ascend (climb) up a rope, this can be performed with the handle in lock position.

WARNING
At all times that the FLOW is being operated or not in the locked position the user must hold the ‘control’ rope below the FLOW.

FLOW must be used with compatible equipment. Use appropriate locking connectors EN362, BS EN 12275 or other suitable safety connector.

FLOW – Check Connector gate



Karabinner must be closed

RESCUE USE

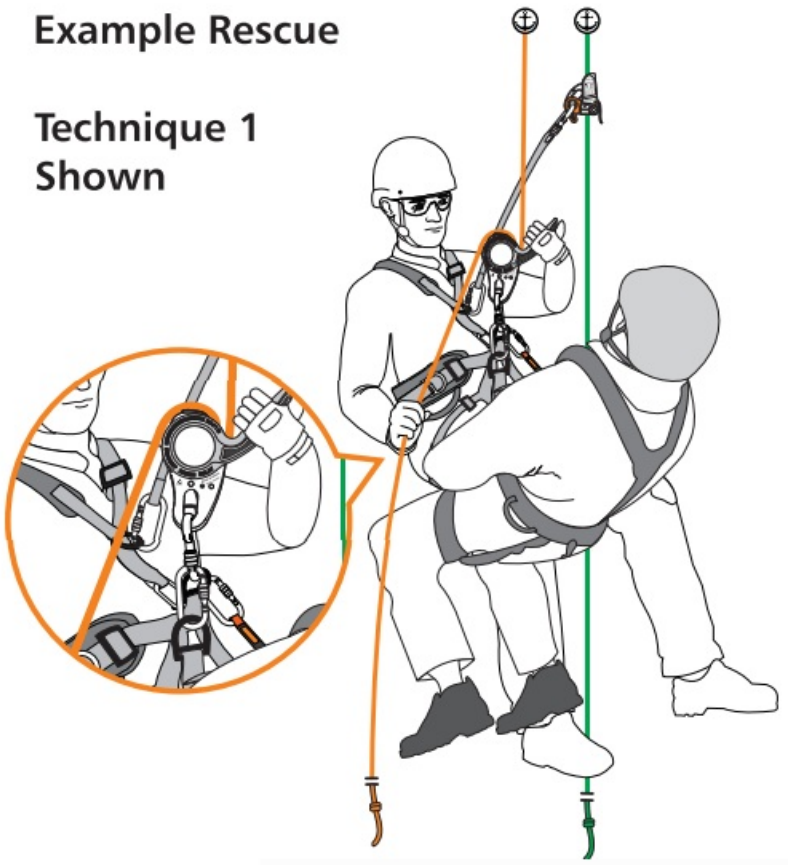
S.TecFLOW-Rescue Use EN341 :2011 Type 2, Class A-Accompanied Abseil Descent.

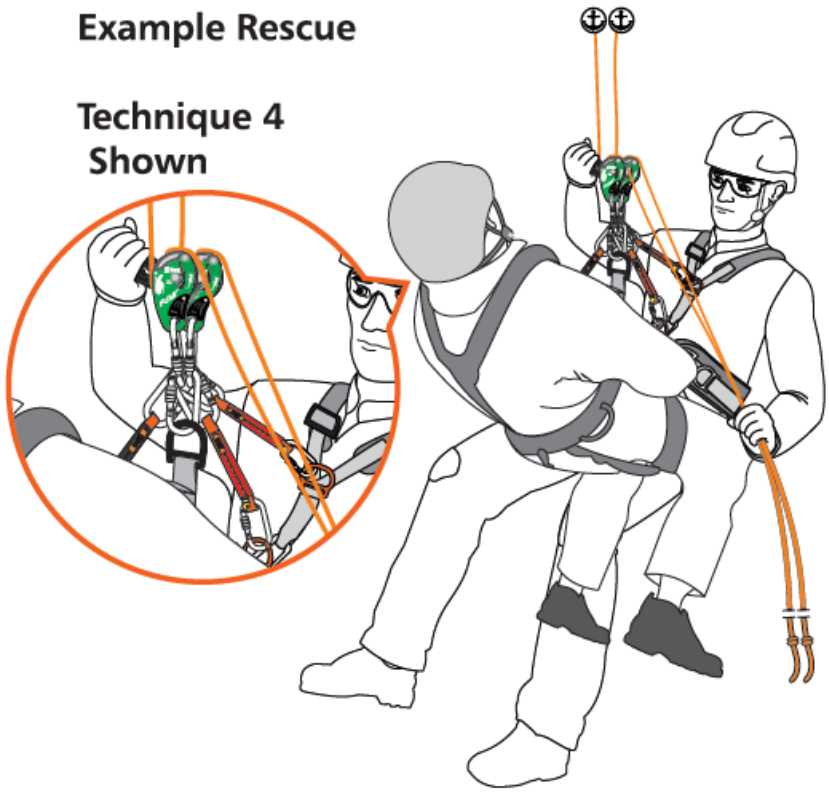
- 200kg Max Load Technique 1 & 2
- 400kg Max load -Technique 3 & 4

S.Tec FLOW Descenders areonly to be used for rescue by competent persons following training the required techniques.

1. Technique 1: One FLOW Descender is connected to the rescuers harness Ventral (waist) point. The FLOW is installed on the main rescuer rope. A suitable back-up device (S_TecEN Forcer or S. Tee Duck-R) should be used on an independent back-up rescue rope. Max Load using this technique is 200kg.
   This technique unit 200kgf of load IS NOT necessary the use of extra carabiner for more friction.
2. Technique 2: One FLOW Descender is connected to the casualty. Connection to either the Dorsal (chest) or Ventral (waist) point. The FLOW is installed on the main rescue rope. A suitable back-up device (S. Tee EN Forcer or S. Tee Duck-R) should be used on an independant back-up rescue rope.
   Max Load using this technique is 200kg. This technique unit 200kgf of load IS NOT necessary the use of extra carabiner for more friction.
3. Technique 3: Two FLOW Descenders devices are connected to the rescuers harness Ventral (waist) point. Each FLOW installed on an independent rescue rope. Max Load using this technique is 400kg.
4. Technique 4: Two FLOW descender devices are connected to the casualty. Connections both to the same harness attachment point, either Dorsal (chest) or Ventral (waist) point. Each FLOW installed on an independent rescue rope. Max Load using this technique is 400kg.

FUNCTION TESTING IS ESSENTIAL prior to descent. Always begin rescue descents holding the lower sections of both ropes.

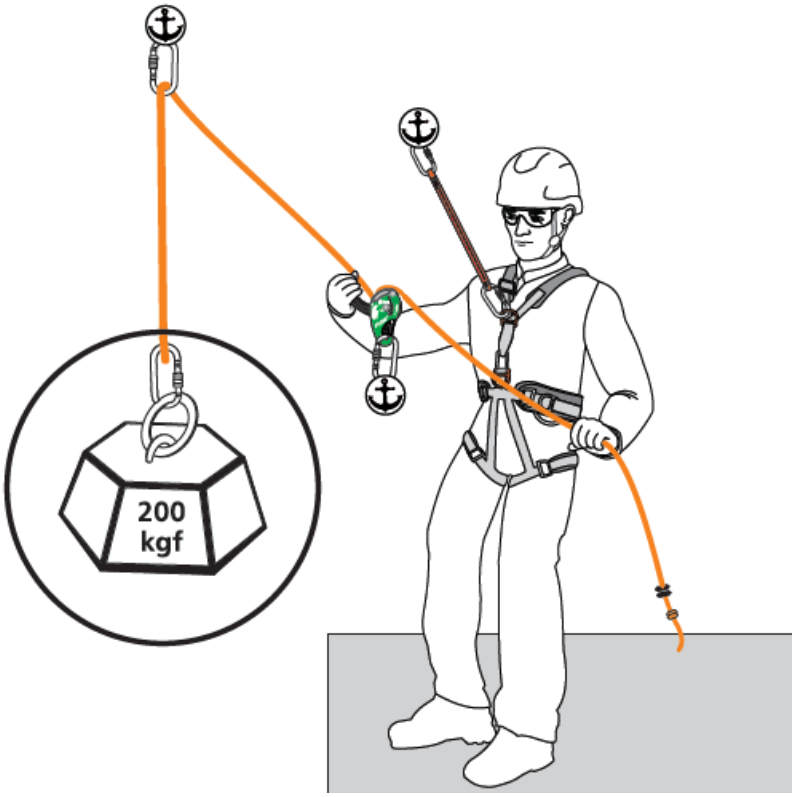




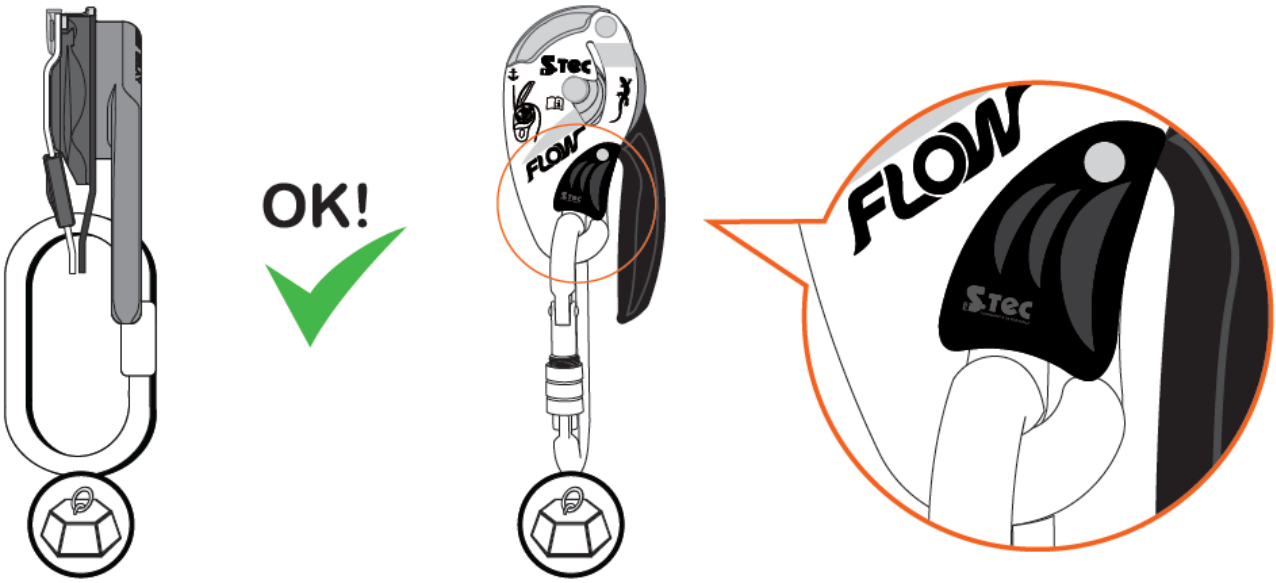
LOWERING DESCENT

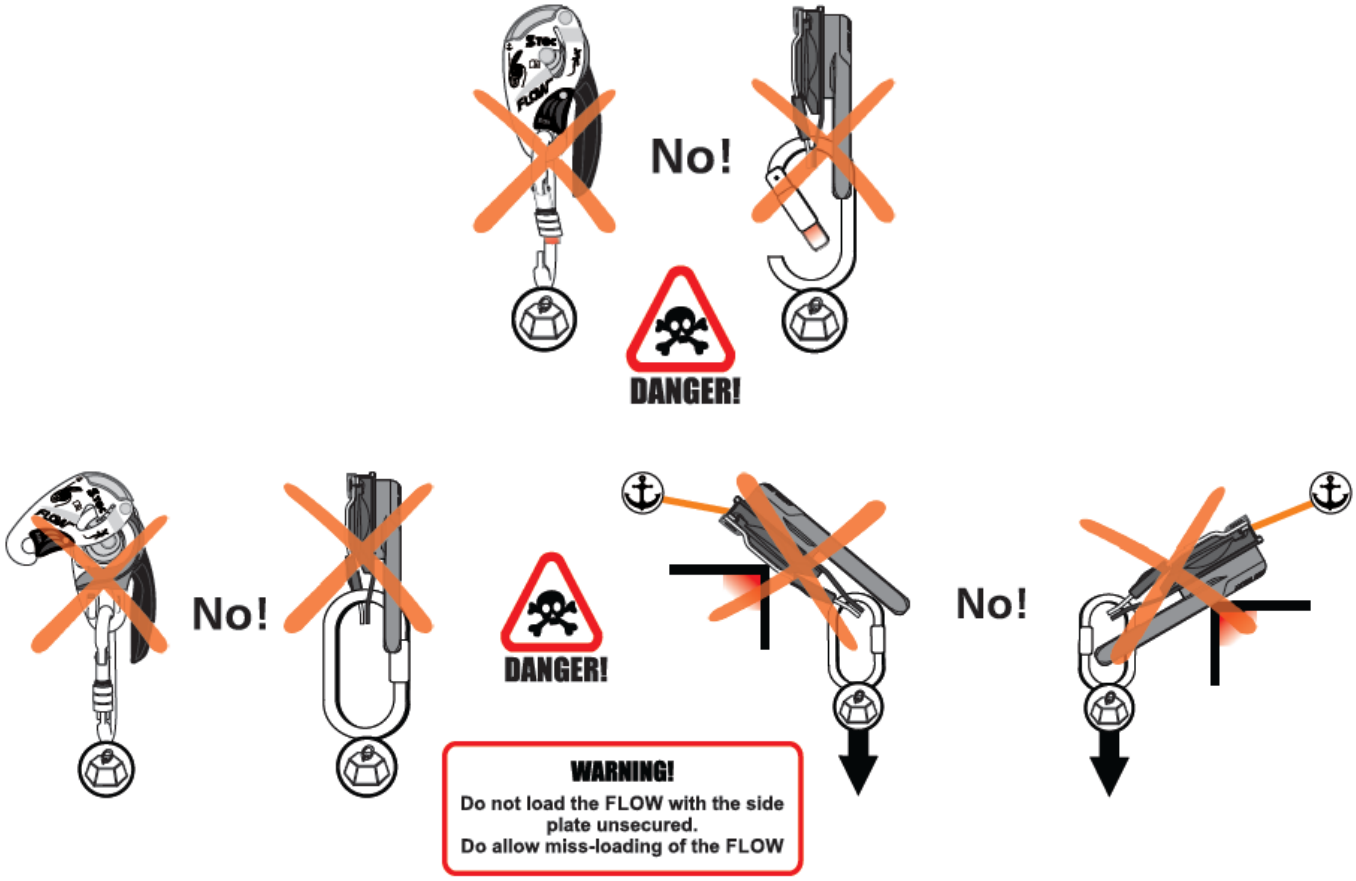
- Technique shown using a single FLOW device- Max Load 200kg.
- A secondary back up system is recommended.

- For loads of up to 400kg two FLOW devices are used, installed on independent rescue lowering ropes.

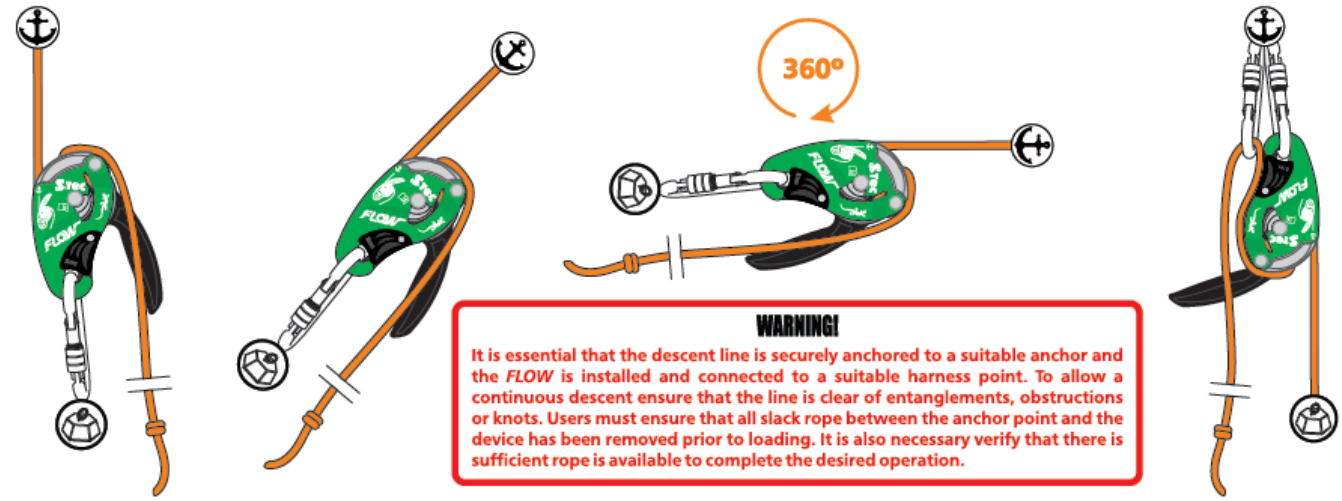


CONDITIONS OF WORK





WARNING!
Do not load the FLOW with the side plate unsecured.
Do allow miss-loading of the FLOW

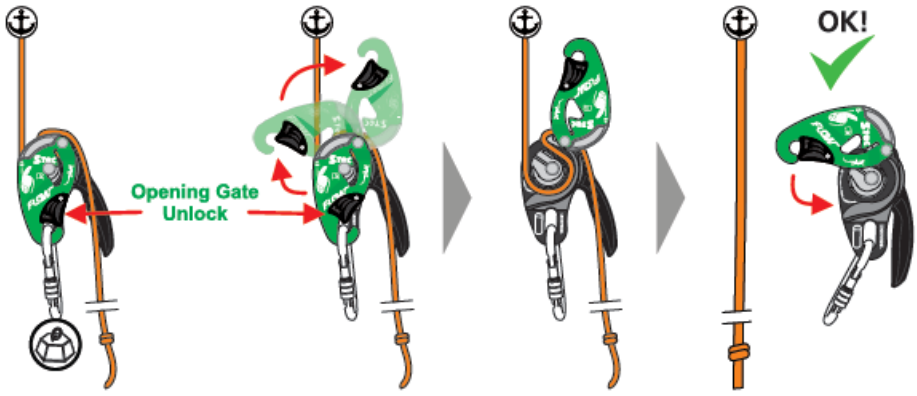


WARNING!
It is essential that the descent line is securely anchored to a suitable anchor and the FLOW is installed and connected to a suitable harness point. To allow a continuous descent ensure that the line is clear of entanglements, obstructions or knots. Users must ensure that all slack rope between the anchor point and the device has been removed prior to loading. It is also necessary verify that there is sufficient rope is available to complete the desired operation.

REMOVING THE ROPE

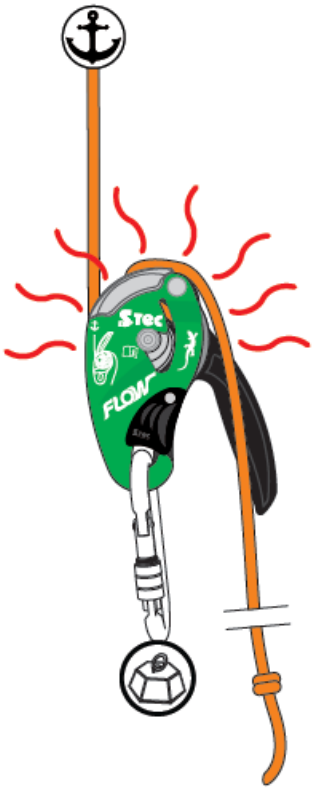
Prior to removal from the rope users must verify personal safety. To remove the rope from the FLOW, release any

rope tension and then open the side plate. This allows the rope to be removed.



ADDITIONAL INFORMATION

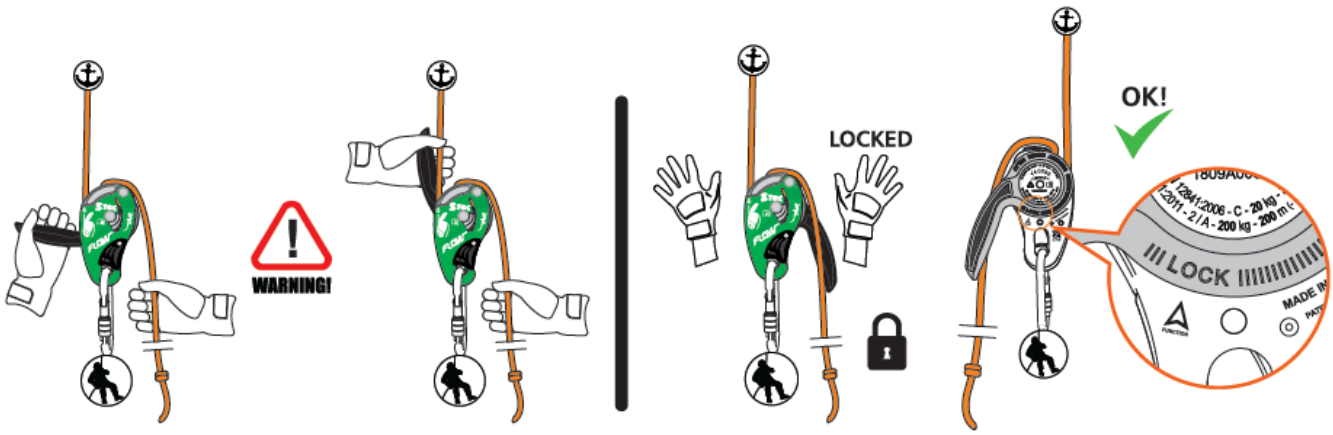
ATENCION!
The equipment may become hot and may damage the line during or after long descents., Max sp eed of descent for two people= 0,5 m/s



- To avoid accidental droppin of the FLOW, always keep it secured to a suitable anchorage.
- When not in use hanging on the harness never leave the Moving Side Plate open.
- The side plates should be in the closed position during storage.

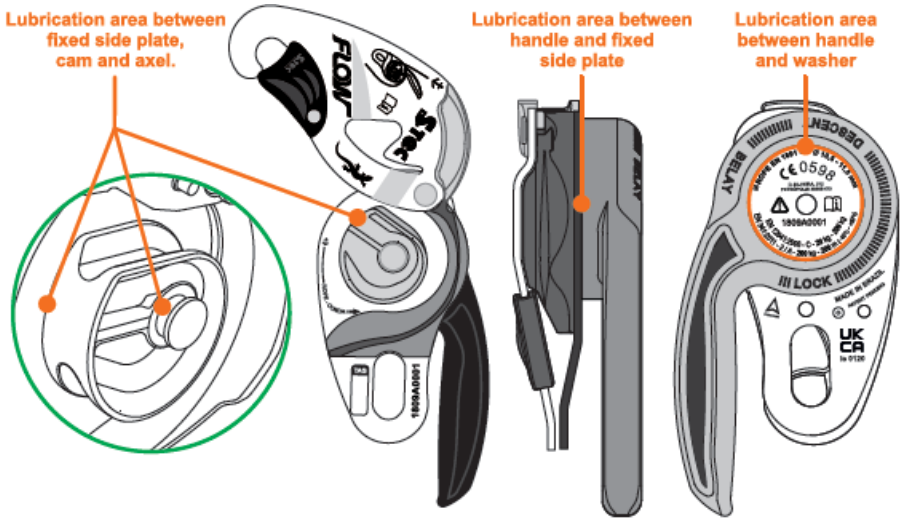
LOCKING-OFF

Excluding during planned and controlled descent the FLOW must be" Locked-Off". The Auto-Stop function of the Flow is not an acceptable way to leave the device when not descending. To ensure Is locked, keep handle as pictured. There is no requirement to use the panic lock function of the DOS model. It should not be used to lock off.



The FLOW can be used to ascend with the handle in the locked position.

LUBRICATION



- The use of S. Tee Flow in dusty enviroments or with high degree of particles in suspension may cause the mechanism to be contamined and even stop working.
- The S. Tee Flow should be lubricated just after the cleaning as mentioned in this manual.
- For mechanism lubrication is necessary the multi use lubricant and anti-corrosive oil application made by Teflon base. (ex: WD-40)
- After lubrication, wipe off excess to prevent contamination of ropes and textile equipment.

Observation:
For a better use of the useful life of the FLOW in hostile environments, such as blasting, cement plants, slopes and other environments with small particles in suspension, it is recommended to protect the equipment. If contaminated, decontamination, cleaning and lubrication are recommended as detailed in this manual.

GENERAL INFORMATION

- Read and understand this manual prior to use and save for future reference. Only the techniques presented in

this manual are authorized. Some examples of miss-use are included, these have a stripe or pictogram of a skull and should be avoided, these are some examples of miss-use, it is impossible to foresee all ways equipment can be miss-used and users should never use equipment in ways that are not 100% verified prior to being used to provide personal safety, in case of doubt contact SAFETEC. When any doubt exists regarding its efficiency equipment must not be used.

- ROPE CONDITION: Wear, wetness and contaminants will affect the performance of the FLOW. Some rope conditions will make control and locking of the FLOW more difficult e.g. oil & grease. The effective operation of the FLOW should be monitored and checked in all conditions. Where any performance doubt exists, the FLOW should not be used.
- SEA WATER: It is essential that this the FLOW is cleaned as soon as practicable after each exposure to seawater or saline environment.
- CHEMICAL REAGENT: Avoid contact with any substance or material that may causes corrosion or other damage to the any material or working action of the device. If contact occurs consult expert advice as to damage and decontamination requirements. Inspect prior to any re-use.
- MAINTENANCE: The FLOW is not user maintainable without prior authorization from SAFETECwith the exception of disinfection, cleaning and lubrication as detailed in this manual.
- DISINFECTION: Following any contamination the source of the contamination should be determined and advice obtained as to suitable disinfecting procedure. After disinfection the device should be re-cleaned. Sterilization may be required.
- CLEANING: If soiled rinse in clean warm water of domestic supply quality (maximum temperature 40°() with mild detergent at appropriate dilution (pH range 5.5 – 8.5). Dry naturally away from direct heat sources. To remove grease use a detergent that has properties that do not affect the metal or plastic components.
- STORAGE: Do not store wet or when contaminated. Store in a controlled place, secure from unauthorised people.

NOTICE: The data contained in this manual about the speeds and performance of the device were obtained using new S. Tee Ropes (models CSE06 and CSE07). The use of other ropes, of other materials, types, constructions, diameters, contaminants, used, dirty, etc., may produce different results regarding the heating of the device, minimum sliding load, etc. If there is concern regarding one or more factors that may interfere with the functioning of the device, it is recommended that these points be resolved via risk analysis prior to use.

WARNING: Do not use de-greasing agents as these will remove essential internal lubrication rendering the device inoperable ..

LIFESPAN: It is very difficult to define the safe lifespan due to varying use and storage conditions and may be as little as one use, or even earlier if damaged (e.g. in transit or storage) prior to first use. For the product to remain in service it must pass a visual and tactile examination. Maximum lifespan: 10 years from 1st use.

WARRANTY: The FLOW has a 3 years warranty against manufacturing defects, proof of purchase required. The warranty does not cover use wear, misuse, abuse, neglect or any alterations, maintenance or repairs performed outside the factory.
OBSOLESCENCE: This device may become obsolete before the end of its lifespan. Reasons for this may include changes in applicable standards, regulations, legislation, development of new techniques, incompatibility with other equipment etc.

TRANSPORTATION & STORAGE: After cleaning store unpacked in a cool, dry, dark place in a chemically neutral environment away from excessive heat or heat sources, high humidity, sharp edges, corrosives or other possible causes of damage.
DECLARATION OF CONFORMITY: Can be acessed on **www.safetecbr.com.br**

Documents / Resources

	S Tec D07 Flow Self Locking Descender [pdf] Instruction Manual D05, D06, D07, D07 Flow Self Locking Descender, Flow Self Locking Descender, Locking Descender, Descender

References

- User Manual